

Hazardous Substance Incident Database Conversion

Concept Paper

Presented to IOWAccess Advisory Council

March 7, 2007

Project Sponsor:

Richard Leopold, Director, Iowa Department of Natural Resources

Project Points-of-Contact:

Adam Broughton, Emergency Response & Homeland Security Unit, (515) 725-0386

Kathy Lee, Emergency Response & Homeland Security Unit, (515) 725-0384

Rodney Tucker, Emergency Response & Homeland Security Unit, (515) 725-0387

Gail George, One Stop/GIS Coordinator, (515) 281-8928

Goal:

This project will improve the quality of data available to the public, improve access to the data by making it available through the web, and improve staff's ability to enter, maintain, and update information in a timely manner. This project will save DNR staff, local agencies, and the public time and money by allowing updates and reports to be posted directly to the database through a web based system. This would allow parties responsible for the incident to provide information required by Iowa Administrative Code in real time.

This project will also allow input of information into the four state Heartland Emergency Response Exchange (HERE) system for use by the states for homeland security and emergency management planning. This project will also allow data to be input into the DNR's Geographical Information System (GIS) to be combined with information from a variety of other regulatory databases.

Project Purpose:

- 1) Convert the current database to a SQL Server database with a web portal.
- 2) Update fields in the database to provide more accurate locational information.
- 3) Connect the new database to the DNR's GIS web application for public accessibility and increased usability.
- 4) Connect the new database to the four state HERE information exchange portal for improved homeland security and emergency management planning activities.
- 5) Locate original Paradox database information and convert for import into new SQL Server database.

Background:

The Hazardous Substance Incident database currently has more than 10,000 entries in two separate database files. These databases contain hazardous substance incident information required by Iowa Administrative Code 567 IAC 131. The details include locational information, responsible party contact information, and incident event and response details. A copy of the initial incident report and any follow up data and reports are stored in hardcopy at the local field office and the DNR Records Center.

The original Hazardous Substance Incident database was setup in 1995. In 2000 a change in software led to the database being moved and the database was partially converted. Due to funding issues not all the fields in the original database were transferred to the new database, leaving gaps in critical data. In 2004 the size of the database made the system unreliable and data older than 2000 was split off into an archived database.

In 2005 staffs from the six Environmental Service Division Field Offices were trained to enter data into the database. Because the database is a Microsoft Access based system there are limitations on how many staff can enter data at the same time, thus creating a bottleneck that can lead to delays in posting spill data. This bottleneck was reduced by setting aside time slots for particular Field Offices to enter data into the database. During this training period it was also discovered that when more than one staff member is entering data there is a risk of lost or duplicate data. Monitoring of the database to prevent lost or duplicate data has increased the work load of some staff.

The DNR has seen an increase in Freedom of Information Act (FOIA) requests for data from consultants, local government entities, non-profit groups and organizations and the public over the last 10 years. The database as currently setup does not allow the user to search by address, so often the database must be sorted by city then searched entry by entry. DNR staff until recently conducted these time consuming searches.

To reduce the time spent on FOIA data searches the DNR decided to place commonly requested information on its web-site allowing public access to the data to conduct their own searches. The information on the web site is updated on a monthly basis. This change, however merely shifted the search problems from DNR staff to the public.

Request:

DNR is requesting **\$20,000.00** in assistance for this project for purposes of planning the database conversion. This conversion will include the development of a new database with a web portal and connectivity to the DNR's Geographical Information System and the four state Heartland Emergency Response Exchange system, migration of missing data from the 1995 database, migration of data from the current database, and addition and/or updating of location fields to simplify searches.

Cost Avoidance:

The proposed improvements to the Hazardous Substance Incident database will result in:

- 1) Reduced reliance on paper records stored at the DNR Record Center or Field Office.
- 2) Increased access to spill data by the public.
- 3) Increased compliance with Iowa code by individuals, groups, and industries.
- 4) Increased usability of data by local governments, consultants, non-profit organizations and the public.
- 5) Reduced staff time entering and confirming data entry.
- 6) Reduced staff time searching data.

Project Funds:

These funds will be used only to contract with an IT consultant to setup and populate the database. No funds will be used for Departmental staff or overhead costs.

Interested Parties/Recipients: Parties interested in this project include, but are not limited to the following:

- Public including; small businesses/entrepreneurs, financial institutions, and consulting firms.
- Non-profit groups including; development groups, environmental groups, and industry advocate groups.
- Local government groups including; Local Emergency Planning Committees, Emergency Management Agencies, and first responders.
- State Agencies including; Department of Economic Development, Iowa Department of Public Health, and Iowa Homeland Security and Emergency Management.
- Federal Agencies such as the Environment Protection Agency.
- Other DNR groups including; Environmental Protection Commission, Field Offices, and Communications Bureau